

## ABSTRACT OF THE DISCLOSURE

A recovered clock signal is simulated from an acquired external clock signal by use of an uncomplicated algorithm requiring few calculations. The recovered clock is usually used in an apparatus that receives external clock and external data signals and  
5 recovers the recovered clock signal from the external clock signal by use of a phase lock loop to process the external data according to the recovered clock. Apparatus according to the invention digitizes the external clock signal and stores resulting the time domain data in memories (step 48). It detects time domain data of edges of the stored external clock (step 50), and the detected time domain data of the edges are converted  
10 into frequency domain data (step 52). The frequency domain data are multiplied by the respective predetermined coefficients in different frequency domains (step 54). The resultant frequency domain data are restored to the time domain data (step 56) to obtain time domain data of the edges of the recovered clock signal. The recovered clock signal is used to measure jitter of the external clock and data signals relative to the recovered  
15 clock signal.